

## A METHOD FOR DETERMINING THE ROTATIONAL VELOCITY OF AN AXLE AND DETECTING A LOCKED AXLE CONDITION

### ABSTRACT OF THE DISCLOSURE

**[0052]** A method for detecting a rotational velocity of a traction motor in a vehicle comprising: obtaining a traction motor signal having at least one phase, wherein the traction motor signal is responsive to an operating condition of the traction motor in an electrically unexcited state. The method also includes processing the traction motor signal to create an indication result based on a frequency of the traction motor signal and determining rotational velocity of the traction motor based on the indication result.